

Partial List of Questions Raised at the PSERC Smart Grid Executive Forum, 3/6/09

Public Policy

1. What difference will public policies and/or regulatory requirements make in the deployment of the smart grid?
2. The regulatory process and the desire to move expeditiously with the Smart Grid appear to be at odds. What recommendations do you have regarding actions that should be taken at the Federal level and at the State level to move forward with the Smart Grid on an expeditious timeline?
3. If you had an option to prioritize smart grid efforts to meet the stimulus bill, what would you recommend be done first?
4. How will the regulatory hurdles be overcome?

Business

1. What is the business case for the smart grid?
2. What are the utility drivers for a Smart Grid? Where are the hard dollars?
3. How do we quantify advantages of a Smart Grid? Is it cost, emissions, technical benefits, or all of them?
4. What are the risks associated with deploying today's smart grid technologies?
5. What changes will fully deployed smart grid make to utility strategic planning and to a utility's organization?
6. How do we identify Smart Grid business opportunities? Is this more like traditional gap analysis in the technology arena, or like an economic analysis performed by utilities and regulators?
7. What are the major Smart Grid issues and challenges by electric service provider/enabler – such as generation, distribution, transmission, ISO/RTO, aggregator, and equipment supplier/vendor?
8. What can wholesalers do to enable Smart Grid?
9. How can Smart Grid affect ISO/RTOs with no real customers (i.e., no end users) in states with no retail choice?
10. One view of an ISO is that it plays an important role in facilitating the Smart Grid by providing an economic incentive through electric markets that encourages distributed generation, renewable generation and demand response resources to positively impact the grid. If you agree with this statement, what are the implications on regions of the U.S. that do not have organized electric markets? If you disagree, why?

Technology

1. How do we define the Smart Grid?
2. Is "Smart Grid" revolution or evolution?
3. What role will "transmission" play in a "Smart Grid?"
4. What are the interoperability expectations/needs in a Smart Grid?
5. What Smart Grid applications are the most significant or have the highest potential benefit by customer segment – such as residential, business/commercial, business/college campus, and large industrial?
6. What types of emerging standards need to be developed to assure smart grid interoperability?
7. How will PHEV affect the grid?
8. How soon do you foresee the advent of Home Area Networks?
9. What technologies do we need to develop or deploy to allow the load to provide ancillary services (spinning reserve, balancing, etc.)?

Deployment

1. What are the barriers to wide scale deployment of a Smart Grid within the next 5 years?
2. How should those barriers be addressed?
3. Are the vendors providing technology variety needed to implement smart grid?
4. Are the technologies for smart grid deployment readily available?
5. What is a relative timeline for when end-use customers will be able to purchase "off the shelf" products that integrate with Advanced Metering Systems?
6. Should the smart grid be deployed first at the customer level or at the system level?
7. How do you see the transition from the legacy solutions to smart grid solutions occurring?

Workforce and Research

1. Are the skills of the existing workforce adequate for smart grid deployment or do we need a more educated workforce?
2. In what ways can universities help the Smart Grid (i.e., producing educated engineers, research,...)?
3. Is there a need to invest in R&D for the smart grid, and if so, what are the most critical areas?